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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/269,897 04/02/99 AOYAGI

K 4047

EXAMINER

HM12/0731

ANDERSON KILL & OLICK  
1251 AVENUE OF THE AMERICAS  
NEW YORK NY 10020-1182

ZEMAN, R

ART UNIT

PAPER NUMBER

1645

DATE MAILED:

07/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/269,897**

Applicant(s)  
**Aoyagi et al.**

Examiner  
**Robert A. Zeman**

Group Art Unit  
**1645**



☒ Responsive to communication(s) filed on Apr 2, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-30 is/are pending in the application.

Of the above, claim(s) 12-30 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-11 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4-5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

Applicant's election with traverse of the claims of Group I in Paper No. 8 is acknowledged. The traversal is on the ground(s) that Groups II and III would have to be searched in order to adequately search Group I. This is not found persuasive because the claims of Groups II and III contains subject matter and limitations that would not be found when searching the claims of Group I to the limitations recited.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-11 are pending and currently under examination. Claims 12-30 have been withdrawn from consideration since they are drawn to a nonelected invention.

### ***Claim Objections***

Claims 4-6 and 7-11 are objected to because of the following informalities: each claim should be introduced by an article. Independent claims should be introduced by "A" or "An" and dependent claims by "The". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3 are rendered vague and indefinite by failing to recite active method steps that read on the preamble of said claims. Additionally, said claims are drawn to "method for treating virus-containing sample". But the claims are silent on the purpose of said treatment. Consequently, it is impossible to determine the metes and bounds of the claimed invention.

Claim 1 is rendered vague and indefinite by the use of the phrase "and (2) selected from the group consisting of.....". What is selected from the Markush group? Use of the phrase "and (2) **a reagent** selected from the group consisting of ...." is suggested.

Claim 2 is rendered vague and indefinite by the use of the phrase "and (3) selected from the group consisting of.....". What is selected from the Markush group? Use of the phrase "and (3) **a reagent** selected from the group consisting of ...." is suggested.

Claim 4 is rendered vague and indefinite by the use of the phrase "contains urea, an imidazole ring-containing compound or and indole ring-containing compound". Which elements are essential and which are optional? As written it is impossible to determine the metes and bounds of the claimed invention.

Claim 10 is rendered vague and indefinite by use of improper Markush language. The penultimate member of the group should be followed by the word "and". Additionally,

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parenthesis are improperly used throughout the claim. Are the parenthetically listed viruses recited as examples or do they represent claim limitations? As written it is impossible to determine the metes and bounds of the claimed invention.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cummins et al. (U.S. Patent 5,081,010).

Cummins et al. disclose a method of treating a virus containing sample using a composition comprising of an alcoholamine, a non-ionic surfactant, cholic acid and an anionic surfactant for the extraction of herpes simplex viral antigens (see columns 3-4). Therefore, Cummins et al. clearly anticipates the aforementioned claims which recite an method for treating virus-containing samples with a solution containing an anionic surfactant and a non-ionic surfactant.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma (WO 92/19285) in view of Kokai (Japanese Patent Abstract No. 53-104724, IDS-4) and Cloyd et al. (U.S. Patent No. 6,074,646).

Sharma discloses a composition and method of use for disinfecting blood. Said composition contains at least one non-ionic surfactant and a stabilizer. Sharma differs from the claimed invention in that he does not disclose the use of combination of surfactants (i.e. non-ionic, anionic and amphoteric). Kokai No. 53-104724 discloses the use of non-ionic surfactants and protein-denaturing agents (urea) for the removal of HBV antigens from blood samples (See 2nd paragraph). Cloyd et al. disclose the treating of HIV infected sera with a variety of amphoteric surfactants, non-ionic surfactants, anionic surfactants and protein denaturing agents (See column 19). Additionally Cloyd et al. disclose that the aforementioned agents inactivated

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the viral agents in the sample since they were non-reactive to HIV specific antibodies. Consequently, it would have been obvious to one of skill in the art to use the combinations of surfactants disclosed by Cloyd et al. and Kokai No. 53-104724 in the method disclosed by Sharma since the **combinations** of the various surfactants and protein denaturing agents would enhance the effectiveness of the Sharma's method of disinfecting bloods since their effects would be additive.

Claims 5 and 6 are included in this rejection even though the aforementioned references do not address the various compounds listed in said claims since they are both dependent on claim 4 which recites "said treatment solution further contains urea, an imidazole ring-containing compound **or** an indole ring-containing compound". Hence the claim recites 3 alternatives, one of which, urea, is covered by the disclosures of this rejection.

### ***Conclusion***

**No claim is allowed.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Zeman whose telephone number is (703) 308-7991. The examiner can be reached between the hours of 7:30 am and 4:00 pm Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, Donna Wortman, Primary Examiner can be reached at (703) 308-1032 or the examiner's supervisor, Lynette Smith, can be reached at (703)308-3909.

A handwritten signature in black ink, appearing to read 'D. Wortman', with a stylized, flowing script.

DONNA WORTMAN  
PRIMARY EXAMINER

Robert A. Zeman

July 25, 2000